

Selecting an Engineer

Background

Hiring a Professional Engineer (PE) is a small cost to ensure the safety and longevity of a dam. It's also required by the chief engineer of the Kansas Division of Water Resources for the design of new dams, and the repair or modification of existing dams.

Chapter 82a, Article 3 - Obstructions in Streams requires that a licensed engineer perform inspections of significant hazard and high hazard dams. The chief engineer also requires applications for permits to construct, repair, or modify a dam be prepared by an engineer who will plan, design, and oversee the construction of the dam. Maps, plans, profiles, reports, and specifications for any dam must be prepared by, or under the supervision of, a licensed professional engineer competent in the design and construction of dams.

Selection Suggestions

To select an engineer, identify potential candidates by asking those who have designed new or modified dams. Also look in directories for firms listed under agricultural or civil engineering. Another starting point is the Internet because most engineers maintain a website detailing their experience and expertise.

Engineering societies, too, may provide lists of approved engineers such as the American Council of Engineering Companies of Kansas. It offers a searchable members directory listing at <http://www.acecks.org/Home.aspx>. One way to search this listing is to use "dam" as a keyword in the "membership" section in the "firm specialties" section.

A state agency that may be helpful is the Kansas State Board of Technical Professions (900 S.W. Jackson Street, Suite 507 Topeka, Kan. 66612-1257, 785-296-3053). This agency can confirm that an engineer is registered as a Professional Engineer in Kansas at its website www.accesskansas.org/ksbtp/.

A list of engineers, too, is available from the Water Structures Program, which is in the Division of Water Resources at the Kansas Department of Agriculture. As a

regulatory agency, we cannot give advice or recommendations for an engineer.

An engineer does not have to be based in Kansas but must be licensed to practice in Kansas because plans submitted for approval must be signed by a professional engineer licensed to practice in the State of Kansas. Because the Water Structures Program has specific requirements for engineering work, applications for permits, and documentation, any engineer you select should be well versed in current requirements.

When contacting engineers, ask about their previous experience and a list of prior clients. Talk with these clients about the engineer's work quality, timeliness, costs, and other concerns. Your selection should be based on the engineer's qualifications, experience, approach to solving your problem, a written estimate of the intended work, and other factors important to you.

*From: Procuring the services of a Professional Engineer,
American Association of State Dam Safety Officials*

Why Do I Need an Engineer? All dams meeting government regulatory definitions—no matter what their size or level of engineering—will deteriorate with time. Periodic inspection, proper maintenance and occasional repair and rehabilitation are inevitable. An owner needs the expertise of an engineer to perform inspections or evaluate and undertake corrective measures of a dam. An engineer can investigate the problem and recommend a course of action that may include the design of corrective measures and the preparation of construction plans and specifications. The engineers also can assist in selecting a contractor and will provide valuable construction inspection services.

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